In The Claims:

Please amend the claims as follows:

1. (Cancelled).

2. (Amended) An imaging system comprising:

a gantry;

an x-ray source coupled to said gantry, said x-ray source generating an x-ray flux, wherein a portion of said x-ray flux becomes scatter radiation;

a first scatter detector coupled to said gantry, said first scatter detector receiving said scatter radiation, said first scatter detector further generating a first scatter signal in response to said scatter radiation;

a host computer receiving said first scatter signal and generating therefrom an image; and ~~The system of claim 1, further comprising~~ a CT detector coupled to said gantry, said CT detector adapted to generate a detector signal in response to said x-ray flux.

3. (Previously presented) The system of claim 2, wherein said first scatter detector is positioned substantially adjacent to said CT detector.

4. (Previously presented) The system of claim 2, wherein said first scatter detector is positioned substantially adjacent to said x-ray source.

5. (Previously presented) The system of claim 2, further comprising a second scatter detector coupled to said gantry.

6. (Original) The system of claim 5, wherein said first scatter detector is positioned on a first side of said CT detector and said second scatter detector is positioned on a second side of said CT detector.

7. (Original) The system of claim 5, wherein said first scatter detector and said second scatter detector are positioned on only one side of said CT detector.

8. (Currently Amended) The system of claim ~~1~~ 2, wherein said x-ray source comprises an extended x-ray source.

9. (Previously presented) A method for data collection for an imaging system comprising:

activating an x-ray source;

generating an x-ray flux;

receiving scatter radiation from said x-ray flux in at least one scatter detector coupled to a rotating gantry;

generating a scatter signal in response to said x-ray flux;

receiving said scatter signal in a host computer; and

generating an image from said scatter signal.

10. (Original) The method of claim 9 further comprising generating a two dimensional image.

11. (Currently amended) A computed tomography system comprising:

a gantry;

an x-ray source coupled to said gantry, said x-ray source generating an x-ray flux;

a CT detector coupled to said gantry, said CT detector generating a detector signal in response to said x-ray flux;

a first scatter detector coupled to said gantry, said first scatter detector generating a first scatter signal in response to said x-ray flux; and

a host computer receiving said detector signal and said first scatter signal and generating an image from said first scatter signal.

12. (Original) The system of claim 11, wherein said x-ray source comprises an extended area x-ray source.

13. (Original) The system of claim 11, wherein said first scatter detector is positioned substantially adjacent to said CT detector.

14. (Original) The system of claim 11, wherein said first scatter detector is positioned adjacent to said x-ray source.

15. (Original) The system of claim 11, further comprising a second scatter detector coupled to said gantry.

16. (Original) The system of claim 15, wherein said first scatter detector is positioned on a first side of said CT detector and said second scatter detector is positioned on a second side of said CT detector.

17. (Original) The system of claim 15, wherein said first scatter detector and said second scatter detector are positioned on only one side of said CT detector.

It is respectfully submitted that all pending claims are in a condition for allowance. A notice of allowability is therefore respectfully solicited. Please charge any fees required in the filing of this amendment to Deposit Account 50-0476.

The Examiner is invited to contact the undersigned at (248) 223-9500 if any unresolved matters remain.

Respectfully Submitted,

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